



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/816,657

04/02/2004

Thomas A. Follo

6579-0439

9671

49698 7590 05/14/2008
MICHAUD-DUFFY GROUP LLP
306 INDUSTRIAL PARK ROAD
SUITE 206
MIDDLETOWN, CT 06457

EXAMINER

LANDRUM, EDWARD F

ART UNIT

PAPER NUMBER

3724

MAIL DATE

DELIVERY MODE

05/14/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/816,657
Filing Date: April 02, 2004
Appellant(s): FOLLO ET AL.

Thomas Follo et al.
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 4/23/2008 appealing from the Office action mailed 2/12/2007.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

EP 1252982A1	Coffin '982	10-2002
6,212,777	Gilder et al.	04-2002
4,407,067	Trotta	10-1983

5,365,665

Coffin '665

11-1994

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim 1 4, 8, 10, and 28 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Coffin '982.

Coffin '982 teaches (see Figures 4-6E) a razor cartridge comprising a guard (18) and a cap (28). At least four razor blades (22) are positioned between the guard (18) and cap (24). Each blade has a cutting edge (24) and an exposure relative to the two skin engaging surfaces (34 on the guard, 32 on the cap). A tangent line (36) extends between the contact surfaces (34 and 32). Coffin '982 further teaches that the blades can be positioned in any number of ways until an optimal design or "feel" is found for a given situation (Paragraphs 7-11 and 23), including the forward most blade having a negative exposure, the two interior razor blades having exposures greater than the forward most blade, thereby making the overall exposure of the interior blades greater than the exposure of the first blade, and the last razor blade having a positive exposure. Lastly, Coffin '982 teaches (Col. 6, lines 1-8) teaches the spacing of the razor blades decreasing from forward to aft in the cartridge.

Coffin '982 does not explicitly state that the overall exposure of each of the four razor blades is an average of their individual exposures nor that an exposure line, which is perpendicular to the tangent line, is used to measure the individual exposure. The measuring and determining of individual and overall exposures though is inherent in

Coffin '982 because Coffin '982 teaches that changing the individual exposure of each blade will affect the overall exposure of the apparatus (see Paragraphs 7-11).

Coffin '982 teaches all of the elements of the current invention as stated above except the overall exposure of the interior razor blades being substantially the same, the overall exposure of the last razor blade being not less than the overall exposures of the interior blades, and the blades being positioned so that the exposure of the first blade is negative, the overall exposure of the interior blades are substantially the same, and the exposure of the last blade is positive.

Although Coffin '982 does not specifically recite the claimed overall exposures Coffin '982 does teach that it is an obvious design choice to change the exposures of each blade to create different "feels" or tune the razor for specific applications (Paragraph 7). Therefore, the examiner takes official notice that it would have been an obvious design choice to a person of ordinary skill in the art to make the exposure of the first blade negative, the overall exposure of the interior razor blades substantially equal, and the last blade's exposure positive and not less than the overall exposure of the interior blades, because discovering the optimal exposure of each blade as related to every other blade and the cartridge as a whole would have been a mere design consideration based on the "feel" wanted by a user for a particular shaving function, or the tuning of a razor for a specific application. Such a modification would have involved only routine skill in the art to accommodate a user's requirements. It has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges of parts would only involve routine skill in the art.

Claims 23 and 24 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Coffin '982 in view of Gilder et al, hereinafter Gilder.

Coffin '982 teaches all of the elements of the current invention as stated above except for specific ranges for the overall exposure of each blade. The first blade being between -0.05mm and $+0.03\text{ mm}$, and the interior blades being between -0.04 mm and $+0.04\text{ mm}$.

Gilder teaches an acceptable range of exposures for razor blades that are increasing in exposure is between -0.2 mm and $+0.2\text{ mm}$ (Col. 4, lines 5-14).

It would have been obvious to have modified Coffin '982 to incorporate the teachings of Gilder to find optimal ranges or positions as related to the overall exposure of each blade for the purpose of preventing irritation and increasing the life of each blade by allowing each blade to aid in the cutting process instead of a single blade performing most of a cutting operation. Furthermore, it would have been an obvious matter of design choice to a person of ordinary skill in the art to arrange the blades within specific parameters related to the overall exposure of each individual blade because discovering a workable range for the exposure of each blade would have been a mere design consideration based on the desired cutting depth of each blade as related to the feel of the device. Such a modification would have only involved routine skill in the art to accommodate any user based requirements. It has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimal workable ranges involves only routine skill in the art.

Claims 29 and 30 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Coffin '982 in view of Trotta.

Coffin '982 teaches all of the elements of the current invention as stated above except the largest intrablade span not being greater than 1.65 mm and the smallest intrablade span not being greater than 1.2 mm.

Trotta teaches (Col. 4, lines 67-68) intrablade spans being preferably between 0.03 and 0.08 inches, which is between .762 and 2.032 mm.

It would have been obvious to have modified Coffin '982 to incorporate the teachings of Trotta to incorporate intrablade spans that decreased between an optimum range for the purpose of improving comfort and increasing performance by preventing the skin of a user from becoming un-stretched while cutting, potentially nicking the user or decreasing the performance of the shaver. Furthermore, it would have been an obvious matter of design choice to a person of ordinary skill in the art to arrange the blades within specific parameters related to the span between each blade because discovering a workable range for span between each blade would have been a mere design consideration based on a user's comfort and blade performance requirements. Such a modification would have only involved routine skill in the art to accommodate any user based requirements. It has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimal workable ranges involves only routine skill in the art.

Claim 31 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Coffin '982 in view of Coffin '665.

Coffin '982 teaches all of the elements of the current invention as stated above except wash through openings defined by a rear surface of the razor cartridge and a longitudinal wedge shaped surface aligned with the openings.

Coffin '665 teaches (see Figures 4 and 5) the use of a plurality of openings (12) in a rear wall of a shaving cartridge and a longitudinal wedge shaped surface (10) aligned with the wash through openings for the purpose of optimizing cleaning efforts by preventing soap residue from gathering inside the housing.

It would have been obvious to have modified Coffin '982 to incorporate the teachings of Coffin '665 to add a plurality of wash-through openings and a wedge shaped surface into the rear of the of the shaving cartridge for the purpose of making the shaving unit easier to clean thereby making the shaving cartridge last longer, as well as cut better by removing an debris on the blades that could potentially hinder cutting performance.

(10) Response to Argument

Regarding Appellant's arguments on page 5, towards Coffin '982, Coffin '982 states in paragraphs 7, 8, 10, 11, and 23 it is obvious to modify the exposures of each blade in a set of blades on a razor to provide different "feels" or to tune the razor for different specifications. Coffin '982 may indeed only provide a single embodiment of his own that shows the overall exposure of the two interior razor blades being equal, but this embodiment is just one of an infinite number. Figured 6A-6E show just how much a manufacturer can vary the overall exposure of four blades. Figure 6A shows blades that continually increase in exposure (Col. 5, lines 24-27). Figure 6C shows a non-

progressive blade exposure where the blades alternate from negative to positive exposures (Col. 5, lines 27-34). Figure 6D shows a blade arrangement with varied exposures (Col. 5, lines 34-46). Coffin's disclosure makes it obvious for one of ordinary skill in the art to try any configuration of four razor blades in order to provide a different "feel" or to tune the razor to a different specification.

In response to Appellant's arguments on pages 6 and 7 directed towards Gilder, the term non-progressive holds little weight as Appellant's blades are actually arranged in a progressive manner. Appellant's blades however are not arranged in a continuously progressive manner. Gilder has been used to teach progressive blade geometry, but instead has been used to teach a range which blade exposures in a razor should generally be between to perform optimally. Furthermore, Gilder does not teach away from one of ordinary skill in the art modifying Coffin '982. Gilder teaches another one of many obvious exposure arrangements for a group of razor blades on a razor. Gilder might even provide more of a reason that it would be obvious modify Coffin '982 due to the fact that Gilder does indeed teach a different blade exposure arrangement.

Neither Trotta, nor Coffin '665 teach away from it being obvious, based on Coffin '982, to one of ordinary skill in the art to make the exposure of the first blade negative, the overall exposure of the interior razor blades substantially equal, and the last blade's exposure positive and not less than the overall exposure of the interior blades.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

Art Unit: 3700

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Edward F Landrum/
Examiner, Art Unit 3724

Conferees:

Boyer D. Ashley, SPE 3700
/Boyer D. Ashley/
Supervisory Patent Examiner, Art Unit 3724

Allan N. Shoap, SPE 3700
/Allan N. Shoap/
Special Programs Examiner, TC 3700

Michaud-Duffy Group LLP
Centerpoint
306 Industrial Park Road
Suite 206
Middletown, CT 06457-1532